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ABSTRACT

This study examined alcohol usage among elementary and secondary schools students and college students, based on data from the U.S. Department of Education's Core Alcohol and Drug Use Survey (CADUS). The survey polled 1,452 students at a two-year Midwestern college in 1992, 501 students at a four-year Midwestern college in 1992, and 53,644 students nationally between 1989 and 1991. The study found that among all three sets of student responses, about 70 percent of male and female undergraduates reported first using alcohol before age 18, and approximately 40 percent of each gender reported using alcohol before age 16, with about 20 percent reporting alcohol use before age 14. The study concludes that colleges and universities need to coordinate their alcohol abuse prevention programs with elementary and secondary schools for the programs to become effective in preventing alcohol use and abuse among pre-collegiate students. (Contains 27 references.) (MDM)

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INTRODUCTION AND BACKGROUND OF THE PROBLEM

A landmark 1990 <u>Carnegie Foundation Report</u> declared that the negative consequences generated from the use of alcohol were the most significant issue on college campuses. Sixty-eight percent of violent behavior, 75% of sexual assaults and 52% of physical injuries which occur annually on college campuses have been related to alcohol usage (<u>The Program Administrator's Handbook</u>, 1991; Collins and Messerschmidt, 1993). Alcohol use was either partly or completely responsible for 3% of college students dying annually (<u>Digest of Educational Statistics</u>, 1993), 7% of college freshmen dropping out, 25% of overall college dropouts and 34% of academic problems on college campuses (Anderson, 1989). Furthermore, college administrators estimate an annual tuition ioss of more than \$261 million from students leaving because of alcohol usage (<u>Digest of Educational Statistics</u>, 1993).

Colleges and universities have networked to reduce the negative consequences from undergraduate alcohol usage. An example, the Michigan Consortium on Substance Abuse Education (MCSAE), a statewide cooperative, created in 1993, offers memberships to college administrators, staff and students. The goal of MCSAE, as with similar networks between institutions of higher education, is the exchange of ideas for developing and implementing better undergraduate alcohol

abuse prevention programs.

But, is it enough for colleges and universities to focus their alcohol abuse prevention efforts only toward the undergraduates currently enrolled at their respective campuses?

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This study begins with a literature review which looks at K-12 student and college undergraduate alcohol usage, then presents a brief case study of the responses given to the United States Department of Education Core Alcohol and Drug Survey by undergraduates during three separate self-reporting surveys, and closes with a recommendation that colleges network with the K-12 school systems to reduce future undergraduate alcohol abuse.

Literature Review

The importance of K-12 alcohol usage developing into undergraduate alcohol abuse was first indicated by the work of Wechsler and McFadden, (1979) who surveyed 6,952 undergraduates from 34 New England colleges. Multiple regression indicated that students who drank at least once each week in high school were nine times more likely than high school abstainers to be heavy alcohol users in college. Furthermore, 71% of high school abstainers continued to be abstainers or no more than light alcohol users in college. The researchers concluded that the frequency of alcohol usage in high school was the strongest predictor of the volume of alcohol usage as an undergraduate.

After surveying 7,700 undergraduates at 22 colleges regarding when alcohol was first used, Barnes and Welte (1983) used regression analysis which revealed that the age of first use of alcohol was the best predictor for how much alcohol undergraduates consumed. This study indicated that as the age of first use of alcohol became younger there was a increasingly greater frequency and intensity of alcohol usage as an undergraduate. Samson, Maxwell and Doyle (1989) also

found this to be true when they used multiple regression with survey data from 200 undergraduates who were asked when they first used alcohol.

Many studies indicate that significant numbers of K-12 students use alcohol. For example, the <u>Digest of Educational Statistics</u> (1993) reported, based upon United States Department of Education survey data, that in 1992, 87.5% of high school seniors had used alcohol during their lifetime, 76.8% the previous year and 51.3% the previous month. Also, 6.2% of females and 10.1% of males started alcohol usage before 4th grade; 53.1% of females and 53.9% of females between 5-8th grade; 27.8% of females and 25.1% of males started between 9-10th grade; which adds up to 87.1% of the females and 89.1% of males having used alcohol before eleventh grade.

Further defining K-12 alcohol usage was Johnson, O'Malley and Bachman (1993) who surveyed over 30,000 middle and high school students regarding their alcohol usage. This study indicated that 53.7% of 8th graders, 70.2% of 10th graders and 76.8% of 12th graders used alcohol at least once a year; 26.1% of 8th graders, 39.9% of 10th graders and 51.3% of 12th graders used alcohol at least once a month; and 13.4% of 8th graders, 21.1% of 10th graders and 27.9% of 12th graders binge drank at least once every two weeks.

The work by Rachal, Guess, Hubbard, Maaisto, Cavanaugh, Waddell and Benrud (1982) indicated that as the age of first alcohol use became younger, there was also a corresponding increase of alcohol-related problems experienced by adolescents and young adults. The Michigan Substance Abuse and Traffic Safety Information Center Report (1994) reported that 33% of adolescents age 14-17 experience negative consequences from alcohol usage, 26% of eighth graders become drunk at least once during their lifetime, 18% at least once during the prior year and 8% at least once during the prior month.

Female high school students binge drink (drinking five or more drinks at

One sitting during a two week period) as much as their male counterparts (Johnson, 1989) with the "adolescent gender binge drinking gap" having been narrowed into insignificance (Engs and Hanson, 1992). Johnson et al (1993) found that 12.8% of female 8th graders, 18.6% of female 10th graders and 20.3% of female 12th graders, like their male counterparts, binge drank at least once every two weeks. The National Household Survey on Drug Abuse (1990) stated that 28% of adolescents, age 12-17, binge drink to the point of blackout.

Attempting to define undergraduate alcohol usage, Kraft (1984) surveyed 3,196 University of Massachusetts undergraduates from 1976-80 regarding the frequency of their alcohol usage. Factor analysis indicated that 94% had used alcohol at least once a year with 77% drinking on average 6.6 drinks each week. When Hunter (1990) surveyed 160 undergraduates at Wayne State University regarding the frequency of their alcohol usage, 66% reported drinking alcohol at least once each year. Presley et al (1992) completed a secondary analysis on the responses of 56,361 undergraduates in the 1989-1990 Core Survey data and Presley et al (1993) on the responses of 53,644 undergraduates in the 1989-1991 Core Survey data. Factor analysis in both studies indicated on average 43.9% using alcohol each week and 85.6% used alcohol during the previous year. As Barnes (1994) studied the predictive order of using substances by undergraduates, he used secondary analysis on the 1989-90 national archive of Core Survey data obtained from 58,625 undergraduates. Barnes (1994) found 85.1% of female and 85.3% of male undergraduates using alcohol at least once a year.

Many studies have shown significant undergraduate binge drinking. When Kraft (1988) reviewed approximately 100 studies, factor analysis indicated that depending upon the college campus, 19-22% of undergraduates drank six or more 'rinks in a sitting at least once a week, 26-48% once a month and 53-84% once a year. Wechsler and Issac (1991) studied undergraduate binge behavior by



surveying 611 undergraduates from 14 public colleges in Massachusetts. Their study indicated that 33% of undergraduates binge on alcohol at least once every two weeks. Johnston et al (1993) reported that approximately 40% of college undergraduates binge drink at least once every two weeks. When Wechsler, Davenport, Dowdall, Boeykens and Castillo (1994) surveyed 17,592 undergraduates on public college campuses regarding alcohol usage, an average 44% of both genders binge on alcohol at least once annually and an average 19% binge on alcohol at least once a week.

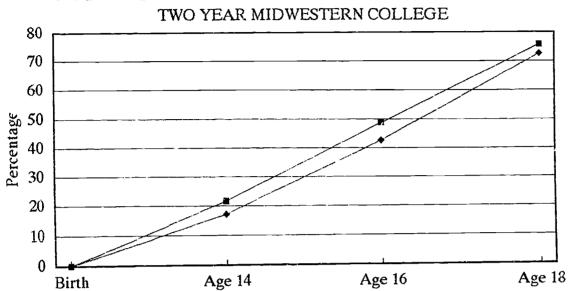
Since the majority of K-12 students use alcohol, as shown in this literature review, it is not surprising then, that a national survey by the National Association of Student Councils indicated that 46% of American high school students believed drinking by their peers was the most serious problem within their high school (Ordovensky, 1991). Nor should it be unexpected, since 60% of high school seniors go directly from high school into college (Digest of Educational Statistics, 1993), that surveys measuring undergraduate alcohol usage, show undergraduate alcohol usage patterns starting, perhaps years, before college aumission.

Case Analysis

Figures 1, 2 and 3 present the undergraduate responses during three separate self-reporting surveys to question 16 (At what age did you first use alcohol?) on the United States Department of Education Core Alcohol and Drug Use Survey.

Regardless, whether the survey was completed at a midwestern two year college (Figure 1), at a midwestern four year college (Figure 2), or nationally (Figure 3), approximately 70% of male and female undergraduates reported using alcohol before age 18. Furthermore, approximately 40% of each gender reported using alcohol before age 16 and approximately 20% before age 14.

AGE OF FIRST USE OF ALCOHOL



__ Cumulative Percentage of First Male Usage

__ Cumulative Percentage of First Female Usage

1992 U.S. Dept. of Education Core Survey N = 1,452

AGE OF FIRST USE OF ALCOHOL

Figure 1

FOUR YEAR MIDWESTERN COLLEGE

80
70
60
95 50
20
10
Birth Age 14
Figure 2

Age 16
Age 18

__ Cumulative Percentage of First Male Usage

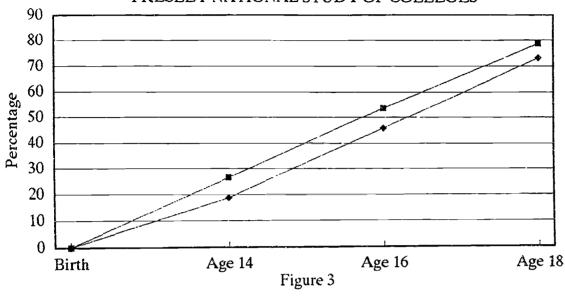
Cumulative Percentage of First Female Usage

1992 U.S. Dept. of Education Core Survey N=501



AGE OF FIRST USE OF ALCOHOL

PRESLEY NATIONAL STUDY OF COLLEGES



- __ Cumulative Percentage of First Male Usage
- __ Cumulative Percentage of First Female Usage

1989-91 U.S. Dept. of Education Core Survey N=53,644

IMPLICATIONS FOR UNDERGRADUATE ALCOHOL PREVENTION PROGRAMS

As indicated in Figures 1, 2 and 3, the age of first use of alcohol is very similar for both genders. Therefore, female alcohol usage before age 18 should be considered as prevalent and serious as male usage.

The majority of male and female undergraduates have used before age 18, many before age 16 and 14. This is significant, because the possibility of alcohol abuse as an undergraduate becomes greater as the age of first alcohol use becomes younger (Barnes et al, 1983). At the other end of the spectrum, is the high school abstainer, who seldom uses alcohol heavily as an undergraduate (Wechsler et al, 1979).

Because alcohol usage patterns established before college admission, are the best predictors of undergraduates abusing alcohol (Sampson et al, 1989), how can colleges intercede while these abusive patterns are being formed?



RECOMMENDATION FOR NETWORKING WITH K-12 SCHOOLS

The definition of "prevention" is to keep something from happening, to preclude, to thwart and to forestall (The Reader's Digest Great Encyclopedic Dictionary, 1968). Therefore, it follows that alcohol abuse prevention programs need to be presented before the alcohol usage patterns become established (Hansen, 1993). Notwithstanding, when colleges and universities concentrate alcohol abuse prevention programs only at their currently enrolled undergraduates, they are directing their efforts toward a population, which already had a significant number, who were alcohol abusers before entering college.

So in conclusion, colleges and universities must network with K-12 schools, in order to reach the large number of students, who develop their abusive drinking patterns before college admission.

BIBLIOGRAPHY

- Anderson, W.A. (1989). <u>Replication of the nation study of the substance use and ab. se habits of college student athletes</u>, College of Human Medicine, Michigan State University, East Lansing, Mi.
- Barnes, M. (1993). <u>Determining the predicted order of drug use from college students' reported use of alcohol and other drugs</u>, published dissertation, July 1. Southern Illinois University at Carbondale, Carbondale, Ill.
- Barnes, G. & Weite, J. (1983). Predictors of alcohol use among college students in New York State. <u>Journal of American College Health</u>. <u>314</u>(4), 150-157.
- Carnegie Foundation for the Advancement of Teaching (1990). <u>Campus Life: In Search of Community</u>. Princeton, NJ: Princeton University Press; 1990.
- Collins, J., & Messerschmidt, P. (1993). Epidemiology of alcohol-related violence. <u>Alcohol, Health and Research World</u>, <u>17</u>(2):93-100.
- <u>Digest of Educational Statistics</u> (1993). United States Department of Education, National Center of Educational Statistics, Washington, D.C., 180, 205.
- Engs, R. & Hanson, D. (1992) Problems among college students: a review of the literature," <u>Journal of Alcohol and Drug Education</u>. <u>35(2):36-47</u>.
- Hansen, W. (1993). School Based Alcohol Prevention Programs, Alcohol World: Health and Research. 17(1):54-60.
- Hunter, G. (1990) A survey of the social context of drinking among college women. Journal of Alcohol and Drug Education. 35(3), Spring.
- Johnson, Patrick B. (1989). Personality correlates of heavy and light drinking female college students. <u>Journal of Alcohol and Drug Education</u>. 34(2), 33-37.
- Johnson, L., O'Malley, P. & Bachman, J. (1993). <u>Drug Use, Drinking and Smoking: National Survey Results from High School, College and Young Adult Populations, 1975 1992</u>, National Institute on Drug Abuse. DHHS Publication, No. (ADM) 91 -1813. Washington DC. Supt. of Docs., U.S. Government, Print Office.
- Kraft, D. (1984). A comprehensive prevention program for college students. <u>Prevention of Alcohol Abuse</u>, New York: Plenum Press, pp. 327-370.
- Kraft, D. (1988) The prevention and treatment of alcohol problems on a college campus. <u>Journal of Alcohol and Drug Education</u>. <u>34</u>(1): 37-51.
- Michigan Consortium on Substance Abuse Education (1995). Annual 1995 Meeting, Livonia, Mi: Madonna University.
- Michigan Substance Abuse and Traffic Safety Information Center Report (1993).

 Lansing, Mi.: Michigan Department of Public Health.



- Ordovensky, P. (1991). Student leaders call alcohol, apathy top school problems. <u>USA Today</u>, June 25.
- <u>Presley, C. & Meilman, P. (1992). Alcohol and Drugs on American College</u>

 <u>Campuses: A Report to College Presidents.</u> The Core Institute, Southern Illinois University, Carbondale, Illinois.
- Presley, C., Meilman, P. & Lyerla, R. (1993). <u>Alcohol and Drugs on American College Campuses: Use, Consequences, and Perceptions on the Campus Environment, Vol. I: 1989-91</u>. The Core Institute, Southern Illinois University, Carbondale, Illinois.
- Program Administrator's Handbook (1991). United States Department of Health and Human Services, Rockville, Maryland, 1991.
- Rachal, J., Guess, L., Hubbard, R., Maisto, S., Cavanaugh, E., Waddell, R. & Benrud, C. (1980). <u>The extent and nature of adolescent alcohol and drug use: the 1974 and 1978 national sample studies</u>. National Institute on Alcohol and Abuse and Alcoholism, Springfield, VA: National Technical Information Service.
- Sampson, H., Maxwell, C. & Doyle, T. (1989). Relation of initial alcohol experiences to current alcohol consumption in a college population. <u>Journal of Studies on Alcohol</u>, 50(3):254-260.
- The <u>National Household Survey on Drug Abuse</u> (1990). United States Department of Health and Human Services, Washington, D.C.
- The Reader's Digest Great Encyclopedic Dictionary (1968). Funk and Wagnalls: Pleasantville, NY.
- United States Department of Education Core Alcohol and Drug Survey (1989-95). Core Institute, Southern Illinois University at Carbondale, Student Health Care Programs, Carbondale, III.
- Wechsler, H. & McFadden, M. (1979). Drinking among college students in New England: extent, social correlates and consequences of alcohol use. Journal of Studies of Alcohol. 40:969-996.
- Wechsler, H. & Issac, N. (1991). <u>Alcohol and the college freshmen: binge</u> drinking and associated problems. Youth Alcohol-Drug Program, Department of Health and Social Behavior, Harvard School of Public Health.
- Wechsler, H., Davenport, A., Dowdall, G., Boeykens, B. & Castillo, S. (1994). Health and behavioral consequences of binge drinking in college. The Journal of the American Medical Association. 272(21):1672-1677.

